

Application No. 09/738,992

REMARKS

The Office Action of April 20, 2005 has been carefully considered. Reconsideration of this application, as amended, is respectfully requested. Claims 1-22 are pending in this application. Of these, claims 1, 11, and 12 are independent claims. An Amendment faxed May 24, 2004 amended claims 1-20 and added new claim 21 and 22. An Amendment faxed November 5, 2004 amended claims 1, 4, 7, 11, 12, 15, and 18. This Amendment amends claim 3 and 14 to add missing comas.

1. Response to Rejection Under 35 USC 103

The Office Action, on pages 2-13, rejects claims 1-6, 8-17, and 19-22 under 35 USC 103(a) as being unpatentable over Carleton et al., U.S. Patent No. 5,781,727 (hereinafter referred to as "Carleton") in view of Tran, U.S. Patent No. 6,054,994 and further in view of Simonoff, U.S. Patent No. 6,351,777 (hereinafter referred to as "Simonoff"), further in view of Cass, U.S. Patent No. 5,692,073 (hereinafter referred to as "Cass"). In addition, the Office Action, on pages 13-14 rejects claims 7 and 18, under 35 USC 103(a) as being unpatentable over Carleton in view of Tran and Simonoff and further in view of Levine et al., U.S. Patent No. 5,680,636 (hereinafter referred to as "Levine"), further in view of Cass.

Applicant's claimed invention is directed at a system that enables users at different locations to work collaboratively on a hardcopy document, and to view each other's annotations to the hardcopy document. The system includes a plurality of workstations communicating with a server. Each workstation comprises a document-imaging device, such as a camera, for generating a digital image of the hardcopy document with handwritten annotations. Handwritten annotations are identified in a captured image of the hardcopy document by image processing. In addition, the system is adapted to track new or additional annotations to the hardcopy document made by each user. Images of the annotations are distributed by the server to each workstation so that each user can selectively view other user's annotations in accordance with the display criteria of the workstation.

In contrast, Carleton describes a system which permits electronic annotations to an application program made by users at remote computers to appear on the displays

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of other participants. More specifically, Carleton describes a system where an application program can run on a single computer, yet remote participants can issue commands to the program. Further, participants can make annotations on their displays, which are copied by the system onto the displays of other participants. (See Abstract of Carleton.) Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Carleton discloses a system for running an application program on one display where electronic annotations of it may be shared on other displays.

Tran discloses "a graphical data entry system for accepting and processing hand sketches and writings such that the user can quickly specify graphical objects in a drawing on a hand-held, mobile computer with a relatively compact screen". "The graphical data entry system [] can be used in conjunction with a camera to annotate pictures taken with the camera". (See Abstract of Tran.) Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Tran discloses a system where images captured with a camera may then be annotated using a graphical data entry system.

Simonoff discloses "a dedicated White Board system [that facilitates] collaboration between a plurality of users". Objects and hyperlinks and text may be placed and tracked on the white board with tools. (See Simonoff abstract.) A white board applet is run on a client host computer connects with the white board application server (See Simonoff column 10, lines 1-13). A user may draw objects on the white board and share them according to a set of permissions (See Simonoff column 11, line 52 to column 12, line 4). Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Simonoff discloses a system where annotations are shared that are made to an electronic white board.

Cass discloses a method for using arbitrary documents as computer readable forms, where any kind of stored digital document may be used as a form (i.e., "formless forms"). In the method, a reference document to which a mark has been added is

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extracted therefrom. Information is provided concerning a set of active elements of the reference document, where the reference document has at least one active element associated with at least one action. The extracted mark is evaluated to determine whether it indicates any of the active elements, which if one is indicated the action associated therewith is performed. (See Cass column 3, lines 23-59.) [Note, the Office Action cites lines 12-19 of Cass but not the column number – Applicant has assumed for the purpose of the discussion herein that the Office Action on page 3, line 19 (and page 6, line 2, and page 8, lines 4 and 8) refers to column 3 of Cass.] Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Cass discloses a method for using flexible hardcopy forms by using an active element(s) that is associated with a reference document to which a mark has been extracted from it.

Levine discloses a system adapted to display an annotated bitmap image of a document. The system has two views, a desk view and an annotation session view. The desk view emulates a user's desk, whereas the annotation view provides screen size document views of a document to be annotated or created using a stylus. (See Levine column 2 line 59 to column 3 line 45.) Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Levine discloses a system where annotations are made using a stylus to a bitmap.

Combining Carlton, Tran, Simonoff, Cass, and Levine together, would thus fail to disclose or suggest a system as claimed by Applicant in which a plurality of workstations share handwritten annotations (i.e., communicating data representing annotations between workstations) made to a hardcopy document by identifying the annotations in a captured image.

Moreover, Carlton, Tran, Simonoff, and Levine taken together or singly concern the annotation of an electronic document; none disclose or suggest the sharing of annotations made to a hardcopy document; for example: Carlton allows participants to create and share annotations to an application program on an electronic display (see Carlton Abstract); Tran permits the annotation of pictures taken with a camera using a

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graphical data entry system (see Tran Abstract); Simonoff allows users to draw and share objects on an electronic white board (see Simonoff column 11, line 51 to column 12, line 5); and Levine discloses that annotations may superimposed on a bitmap image (see Levine Abstract).

Cass in contrast discloses a method for using flexible hardcopy forms, which method relies on at least one active element(s) that is associated with a reference document to which a mark has been extracted from it. When the mark and the action element are associated, the action corresponding to the element is performed. In the PaperWeb example described in Cass (see Cass column 15, line 51 through column 19, line 6), hypertext links in paper documents may be followed by specifying a link as an action element and where the action of a marked link is to return the document associated with the action element.

Applicant respectfully submits that Carlton, Tran, Simonoff, and Levine taken singly or together with Cass fail to disclose or suggest the element of Applicant's claimed invention as recited in independent claims 1, 11, and 12 when taken as a whole, which claims include: identifying handwritten annotations made to a hardcopy document captured at a plurality of workstations, which annotations are communicated to each workstation wherein one or more of the annotations are selectively displayed in accordance with display criteria of each workstation, as Cass concerns the use of active elements in paper-based forms and not the combination of annotations made by a plurality of users to a document as alleged in the Office Action.

That is for the reasons discussed above, Carlton, Tran, Simonoff, Cass, and/or Levine read singly or together, fail to disclose or suggest a system that permits users at a plurality of workstations to selectively view handwritten annotations identified in digital images of a hardcopy document captured at each workstation with a capture device, as claimed by Applicant. Further for the reasons discussed above, the cited references fail to disclose or suggest a system and method as claimed by Applicant that allows users at different locations to work collaboratively on a hardcopy document by allowing annotations to a hardcopy document to be viewed at a plurality of workstation displays in accordance with the display criteria of each workstation, as the claimed system and

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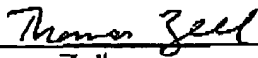
method provide that annotations made to the hardcopy document are communicated between them.

Accordingly, Applicant respectfully submits that independent claims 1, 11, and 12 as amended are patentably distinguishable over Carlton taken singly or in combination with Tran and/or Simonoff and/or Cass and/or Levine. Insofar as claims 2-10 and 13-22 are concerned, these claims depend from one of now presumably allowable independent claims 1 or 12 and are also believed to be in allowable condition.

2. Conclusion

In view of the foregoing remarks, reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is hereby requested to call Attorney for Applicant(s), Thomas Zell.

Respectfully submitted,



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